Appendix B
U.S. Ser. No. 09/634,252
Pending Claims as of August 2002

Claims 1-14, 17-20, and 24-29 have been canceled.

Claims 15 and 22-23 have been amended.

Claims 30-46 have been added.

15 (amended). An isolated nucleic acid molecule selected from the group consisting of:

(a) a nucleic acid molecule having the sequence of SEQ ID NO:2;

(b) a nucleic acid molecule encoding an amino acid sequence comprising the sequence of SEQ ID NO:4;

(c) a nucleic acid molecule that encodes a fragment of the polypeptide of SEQ ID NO:4 having disintegrin activity;

(d) a nucleic acid molecule encoding a fragment of the amino acid sequence of SEQ ID NO:4 having disintegrin activity and comprising amino acids 496-599 of SEQ ID NO:4; and

(e) a nucleic acid molecule encoding a fragment of the amino acid sequence of SEQ ID NO:4 having disintegrin activity and comprising an amino acid sequence selected from the group consisting of amino acids 499 through 530 of SEQ ID NO:4 and amino acids 532 through 586 of SEQ ID NO:4.

16. A recombinant vector that directs the expression of the nucleic acid molecule of claim 15.

21. A host cell transfected or transduced with the vector of claim 16.

22 (amended). A method for the expression of an SVPH3-17 (ADAM23) disintegrin polypeptide comprising culturing a host cell of claim 21 under conditions promoting expression of the vector of claim 21.

23 (amended). The method of claim 22, further comprising recovering the expressed polypeptide.

30 (NEW). A host cell containing the recombinant vector of claim 16.

31 (NEW). A nucleic acid molecule encoding a fusion protein comprising a fragment of the polypeptide of SEQ ID NO:4 having disintegrin activity and a heterologous polypeptide.

32 (NEW). The nucleic acid molecule of claim 31 wherein the fusion protein comprises an amino acid sequence selected from the group consisting of amino acids 496 through 599 of SEQ ID NO:4, amino acids 499 through 530 of SEQ ID NO:4, and amino acids 532 through 586 of SEQ ID NO:4.

33 (NEW). The nucleic acid molecule of claim 31 wherein the fusion protein comprises a heterologous polypeptide selected from the group consisting of an Fc polypeptide, a peptide linker, and/or a leucine zipper polypeptide.

34 (NEW). An isolated nucleic acid molecule that encodes a polypeptide having disintegrin activity and sharing at least 80 percent amino acid identity across the length of an amino acid sequence selected from the group consisting of SEQ ID NO:4 and amino acids 496 through 599 of SEQ ID NO:4.

35 (NEW). The isolated nucleic acid of claim 34 encoding a polypeptide having disintegrin activity and sharing at least 90 percent amino acid identity across the length of an amino acid sequence selected from the group consisting of SEQ ID NO:4 and amino acids 496 through 599 of SEQ ID NO:4.

36 (NEW). The isolated nucleic acid molecule of claim 34, wherein the polynucleotide encodes a polypeptide comprising an amino acid sequence selected from the group consisting of amino acids 499 through 530 of SEQ ID NO:4 and amino acids 532 through 586 of SEQ ID NO:4.

37 (NEW). The isolated nucleic acid molecule of claim 34, wherein the polynucleotide hybridizes to either strand of a denatured, double-stranded DNA consisting of a polynucleotide sequence as set forth in SEQ ID NO:2 under conditions of high stringency in 6XSSC and 50% formamide at 42 degrees C, with washing conditions of 0.2XSSC and 0.1% SDS at 68 degrees C.

38 (NEW). An isolated nucleic acid molecule that encodes a fragment of ADAM23 having disintegrin activity, wherein ADAM23 is the polypeptide of SEQ ID NO:4.

39 (NEW). The nucleic acid of claim 38 wherein the fragment of ADAM23 comprises amino acids 496 through 599 of SEQ ID NO:4.

40 (NEW). The nucleic acid of claim 38 wherein the fragment of ADAM23 comprises an amino acid sequence selected from the group consisting of amino acids 499 through 530 of SEQ ID NO:4, and amino acids 532 through 586 of SEQ ID NO:4.

41 (NEW). The nucleic acid of claim 38 wherein the fragment of ADAM23 further comprises an ADAM23 pro domain amino acid sequence, wherein the ADAM23 pro domain amino acid sequence comprises amino acids 58 through 286 of SEQ ID NO:4.

42 (NEW). The nucleic acid of claim 38 wherein the fragment of ADAM23 further comprises an ADAM23 pro domain amino acid sequence, wherein the ADAM23 pro domain amino acid sequence comprises an amino acid sequence selected from the group consisting of amino acids 145 through 161 of SEQ ID NO:4; amino acids 162 through 186 of SEQ ID NO:4; amino acids 192 through 206 of SEQ ID NO:4; amino acids 210 through 241 of SEQ ID NO:4; amino acids 231 through 261 of SEQ ID NO:4; and amino acids 263 through 282 of SEQ ID NO:4.

43 (NEW). The nucleic acid of claim 38 wherein the fragment of ADAM23 further comprises an ADAM23 catalytic domain amino acid sequence, wherein the ADAM23 catalytic domain amino acid sequence comprises amino acids 286 through 495 of SEQ ID NO:4.

44 (NEW). The nucleic acid of claim 38 wherein the fragment of ADAM23 further comprises an ADAM23 catalytic domain amino acid sequence, wherein the ADAM23 catalytic domain amino acid sequence is selected from the group consisting of amino acids 315 through 327 of SEQ ID NO:4; amino acids 339 through 356 of SEQ ID NO:4; amino acids 357 through 374 of SEQ ID NO:4; amino acids 381 through 397 of SEQ ID NO:4; amino acids 424 through 461 of SEQ ID NO:4; and amino acids 450 through 471 of SEQ ID NO:4.

45 (NEW). The nucleic acid of claim 38 wherein the fragment of ADAM23 further comprises an ADAM23 cysteine-rich domain amino acid sequence, wherein the ADAM23 cysteine-rich domain amino acid sequence comprises amino acids 599 through 786 of SEQ ID NO:4.

46 (NEW). The nucleic acid of claim 38 wherein the fragment of ADAM23 further comprises an ADAM23 cysteine-rich domain amino acid sequence, wherein the ADAM23 cysteine-rich domain amino acid sequence is selected from the group consisting of amino acids 643 through 652 of SEQ ID NO:4; amino acids 653 through 724 of SEQ ID NO:4; amino acids 720 through 733 of SEQ ID NO:4; amino acids 725 through 741 of SEQ ID NO:4; and amino acids 744 through 781 of SEQ ID NO:4.